

The background of the entire page is a solid red color. Overlaid on this are several large, abstract, semi-transparent shapes in a lighter shade of red or orange. These shapes are geometric, with some having rounded corners and others being more angular, creating a layered, architectural effect. They are positioned behind the main text, with the word 'Rosacea' being the most prominent element in the center.

*Questions
& Answers
about . . .*

Rosacea

*National Institute of Arthritis and Musculoskeletal and Skin Diseases (NIAMS)
National Institutes of Health
Public Health Service • U.S. Department of Health and Human Services*

For Your Information

This publication contains information about medications used to treat the health condition discussed in this booklet. When this booklet was printed, we included the most up-to-date (accurate) information available. Occasionally, new information on medication is released.

For updates and for any questions about any medications you are taking, please contact the U.S. Food and Drug Administration at 1-888-INFO-FDA (1-888-463-6332, a toll-free call) or visit their Web site at www.fda.gov.

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Additional copies of this booklet are available from

National Institute of Arthritis and Musculoskeletal
and Skin Diseases
NIAMS/National Institutes of Health
1 AMS Circle
Bethesda, MD 20892-3675

You can also find this booklet on the NIAMS Web site at www.niams.nih.gov/hi/topics/rosacea/rosacea.htm.

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This booklet contains general information about rosacea (ro-ZAY-she-ah). It defines rosacea and describes its symptoms, possible causes, and treatments. If you have further questions after reading this booklet, you may wish to discuss them with your doctor.

What Is Rosacea?

Rosacea is a chronic (long-term) disease that affects the skin and sometimes the eyes. The disorder is characterized by redness, pimples, and, in advanced stages, thickened skin. Rosacea usually affects the face; other parts of the upper body are only rarely involved.

Who Gets Rosacea?

Approximately 14 million people in the United States have rosacea. It most often affects adults between the ages of 30 and 60. Rosacea is more common in women (particularly during menopause) than men. Although rosacea can develop in people of any skin color, it tends to occur most frequently and is most apparent in people with fair skin.

What Does Rosacea Look Like?

There are several symptoms and conditions associated with rosacea. These include frequent flushing, vascular rosacea, inflammatory rosacea, and several other conditions involving the skin, eyes, and nose.

Frequent flushing of the center of the face—which may include the forehead, nose, cheeks, and chin—occurs in the earliest stage of rosacea. The flushing often is accompanied by a burning sensation, particularly when creams or cosmetics are applied to the face. Sometimes the face is swollen slightly.

A condition called vascular rosacea causes persistent flushing and redness. Blood vessels under the skin of the face may dilate (enlarge), showing through the skin as small red lines. This is called telangiectasia (tel-AN-je-ek-tay-ze-ah). The affected skin may be swollen slightly and feel warm.

A condition called inflammatory rosacea causes persistent redness and papules (pink bumps) and pustules (bumps containing pus) on the skin. Eye inflammation and sensitivity as well as telangiectasia also may occur.

In the most advanced stage of rosacea, the skin becomes a deep shade of red and inflammation of the eye is more apparent. Numerous telangiectases are often present, and nodules in the skin may become painful. A condition called

rhinophyma also may develop in some men; it is rare in women. Rhinophyma is characterized by an enlarged, bulbous, and red nose resulting from enlargement of the sebaceous (oil-producing) glands beneath the surface of the skin on the nose. People who have rosacea also may develop a thickening of the skin on the forehead, chin, cheeks, or other areas.

How Is the Eye Affected?

In addition to skin problems, up to 50 percent of people who have rosacea have eye problems caused by the condition. Typical symptoms include redness, dryness, itching, burning, tearing, and the sensation of having sand in the eye. The eyelids may become inflamed and swollen. Some people say their eyes are sensitive to light and their vision is blurred or otherwise impaired.

What Causes Rosacea?

Doctors do not know the exact cause of rosacea but believe that some people may inherit a tendency to develop the disorder. People who blush frequently may be more likely to develop rosacea. Some researchers believe that rosacea is a disorder where blood vessels dilate too easily, resulting in flushing and redness.

Factors that cause rosacea to flare up in one person may have no effect on another person. Although the following factors have not been well-researched, some people claim that one or more of them have aggravated their rosacea: heat (including hot baths), strenuous exercise, sunlight, wind, very cold temperatures, hot or spicy foods and drinks, alcohol consumption, menopause, emotional stress, and long-term use of topical steroids on the face. Patients affected by pustules may assume they are caused by bacteria, but researchers have not established a link between rosacea and bacteria or other organisms on the skin, in the hair follicles, or elsewhere in the body.

Can Rosacea Be Cured?

Although there is no cure for rosacea, it can be treated and controlled. A dermatologist (a medical doctor who specializes in diseases of the skin) usually treats rosacea. The goals of treatment are to control the condition and improve the appearance of the patient's skin. It may take several weeks or months of treatment before a person notices an improvement of the skin.

Some doctors will prescribe a topical antibiotic, such as metronidazole, which is applied directly to the affected skin. For people with more severe cases, doctors often prescribe an oral (taken by mouth) antibiotic. Tetracycline, minocycline, erythromycin, and doxycycline are the most common antibiotics used to treat rosacea. The papules and pustules symp-

tomatic of rosacea may respond quickly to treatment, but the redness and flushing are less likely to improve.

Some people who have rosacea become depressed by the changes in the appearance of their skin. Information provided by the National Rosacea Society indicates that people who have rosacea often experience low self-esteem, feel embarrassed by their appearance, and claim their social and professional interactions with others are adversely affected. (See “Where Can People Get More Information About Rosacea?” on page 8.) A doctor should be consulted if a person feels unusually sad or has other symptoms of depression, such as loss of appetite or trouble concentrating.

Doctors usually treat the eye problems of rosacea with oral antibiotics, particularly tetracycline or doxycycline. People who develop infections of the eyelids must practice frequent eyelid hygiene. The doctor may recommend scrubbing the eyelids gently with diluted baby shampoo or an over-the-counter eyelid cleaner and applying warm (but not hot) compresses several times a day. When eyes are severely affected, doctors may prescribe steroid eye drops.

Electrosurgery and laser surgery are treatment options if red lines caused by dilated blood vessels appear in the skin or if rhinophyma develops. For some patients, laser surgery may improve the skin’s appearance with little scarring or damage. For patients with rhinophyma, surgical removal of the excess tissue to reduce the size of the nose usually will improve the patient’s appearance.

Working With Your Doctor To Manage Rosacea

The role you play in managing your rosacea is important. You can take several steps to keep rosacea under control:

- Keeping a written record of when flareups occur may provide clues regarding what is irritating the skin.
- Most people should use a sunscreen every day that protects against UVA and UVB rays (ultraviolet rays) and has a sun-protecting factor (SPF) of 15 or higher, but sunscreen is particularly important for people whose skin is irritated by exposure to the sun.
- Using a mild moisturizer may be helpful, but avoid applying any irritating products to the face. Some people find that a green-tinted makeup effectively conceals skin redness.
- If your eyes are affected, faithfully follow your doctor's treatment plan and clean your eyelids as instructed.

What Research Is Being Conducted To Help People With Rosacea?

Researchers are studying the eyes of people who have rosacea to find ways to prevent dry eyes and other eye problems related to rosacea. Scientists also are evaluating the most effective ways to use medications to treat rosacea and the best methods to minimize scarring of the sebaceous glands when removing excess nasal tissue in rhinophyma.

Where Can People Get More Information About Rosacea?

- **National Institute of Arthritis and Musculoskeletal and Skin Diseases (NIAMS)**

National Institutes of Health

1 AMS Circle

Bethesda, MD 20892–3675

Phone: 301–495–4484 or

877–22–NIAMS (226–4267) (free of charge)

TTY: 301–565–2966

Fax: 301–718–6366

E-mail: NIAMSInfo@mail.nih.gov

www.niams.nih.gov

NIAMS provides information about skin diseases, arthritis and rheumatic diseases, and bone, muscle, and joint diseases. It distributes patient and professional education materials and refers people to other sources of information. Additional information and updates can be found on the NIAMS Web site.

- **American Academy of Dermatology**

P.O. Box 4014

Schaumburg, IL 60168–4014

Phone: 847–330–0230 or 888–462–3376 (free of charge)

Fax: 847–330–0050

www.aad.org

This national organization can provide referrals to dermatologists. It also publishes a brochure on rosacea. These are available on the organization's Web site or can be obtained by calling or writing the academy.

- **National Rosacea Society**

800 South Northwest Highway, Suite 200

Barrington, IL 60010

Phone: 888–NO–BLUSH (662–5874) (free of charge)

Fax: 847–382–5567

E-mail: rosacea@aol.com

www.rosacea.org

This nonprofit organization provides fact sheets, booklets, and a newsletter on rosacea. It also provides a patient diary checklist for identifying lifestyle and environmental factors that may trigger flareups or aggravate individual conditions.

Acknowledgments

The NIAMS gratefully acknowledges the assistance of Mark Dahl, M.D., Mayo Clinic, Scottsdale, AZ; Sam Huff, National Rosacea Society, Barrington, IL; Robert Katz, M.D., Rockville, MD; M. Carol McNeely, M.D., University Dermatology Associates, Washington, DC; Larry Miller, M.D., Chevy Chase, MD; Alan Moshell, M.D., NIAMS, NIH; and Gary Peck, M.D., Washington Hospital Center, Washington, DC, in the review of this booklet.



The mission of the National Institute of Arthritis and Musculoskeletal and Skin Diseases (NIAMS), a part of the Department of Health and Human Services' National Institutes of Health (NIH), is to support research into the causes, treatment, and prevention of arthritis and musculoskeletal and skin diseases, the training of basic and clinical scientists to carry out this research, and the dissemination of information on research progress in these diseases. The National Institute of Arthritis and Musculoskeletal and Skin Diseases Information Clearinghouse is a public service sponsored by the NIAMS that provides health information and information sources. Additional information can be found on the NIAMS Web site at www.niams.nih.gov.



U.S. Department of Health and Human Services
Public Health Service
National Institutes of Health
National Institute of Arthritis and
Musculoskeletal and Skin Diseases

NIH Publication No. 02-5038
June 2002